Southern Nuclear

Jamie M. Coleman
Regulatory Affairs Director
Vogtle 3 & 4

7825 River Road
Waynesboro, GA 30830
706-848-6926 tel

June 14, 2023

Docket No.: 52-026

ND-23-0438
10 CFR 52.99(c)(1)

U.S. Nuclear Regulatory Commission
Document Control Desk
Washington, DC 20555-0001

Southern Nuclear Operating Company
Vogtle Electric Generating Plant Unit 4
ITAAC Closure Notification on Completion of ITAAC 2.2.02.07f.i [Index Number 145]

Ladies and Gentlemen:

In accordance with 10 CFR 52.99(c)(1), the purpose of this letter is to notify the Nuclear Regulatory Commission (NRC) of the completion of Vogtle Electric Generating Plant (VEGP) Unit 4 Inspections, Tests, Analyses, and Acceptance Criteria (ITAAC) Item 2.2.02.07f.i [Index Number 145]. This ITAAC verified that the Passive Containment Cooling Water Storage Tank (PCCWST) provided water to the Spent Fuel Pool (SFP) and the Passive Containment Cooling Ancillary Water Storage Tank (PCCAWST) provided water to the SFP and the PCCWST. The closure process for this ITAAC is based on the guidance described in NEI 08-01, “Industry Guideline for the ITAAC Closure Process under 10 CFR Part 52”, which is endorsed by the NRC in Regulatory Guide 1.215.

This letter contains no new NRC regulatory commitments. Southern Nuclear Operating Company (SNC) requests NRC staff confirmation of this determination and publication of the required notice in the Federal Register per 10 CFR 52.99.

If there are any questions, please contact Kelli Roberts at 706-848-6991.

Respectfully submitted,

Jamie Coleman

Jamie M. Coleman
Regulatory Affairs Director Vogtle 3 & 4

Enclosure: Vogtle Electric Generating Plant (VEGP) Unit 4
Completion of ITAAC 2.2.02.07f.i [Index Number 145]

JMC/MKO/sfr

cc: Regional Administrator, Region ll
Director, Office of Nuclear Reactor Regulation (NRR)
Director, Vogtle Project Office NRR
Senior Resident Inspector – Vogtle 3 & 4

Southern Nuclear Operating Company
ND-23-0438
Enclosure

Vogtle Electric Generating Plant (VEGP) Unit 4
Completion of ITAAC 2.2.02.07f.i [Index Number 145]

ITAAC Statement

Design Commitment

7.f) The PCS provides a flow path for long-term water makeup from the PCCWST to the spent fuel pool.

8.b) The PCS delivers water from the PCCAWST to the PCCWST and spent fuel pool simultaneously.

Inspections/Tests/Analyses

i) Testing will be performed to measure the delivery rate from the PCCWST to the spent fuel pool.

Testing will be performed to measure the delivery rate from the PCCAWST to the PCCWST and spent fuel pool simultaneously.

Acceptance Criteria

i) With the PCCWST water level at 27.4 ft + 0.2, - 0.0 ft above the bottom of the tank, the flow path from the PCCWST to the spent fuel pool delivers greater than or equal to 118 gpm.

With PCCAWST aligned to the suction of the recirculation pumps, each pump delivers greater than or equal to 100 gpm to the PCCWST and 35 gpm to the spent fuel pool simultaneously when each pump is tested separately.

ITAAC Determination Basis

Multiple ITAAC are performed to verify that the Passive Containment Cooling System (PCS) provides a flow path for long-term water makeup from the Passive Containment Cooling Water Storage Tank (PCCWST) to the spent fuel pool (SFP) and that the PCS delivers water from the Passive Containment Cooling Ancillary Water Storage Tank (PCCAWST) to the PCCWST and spent fuel pool simultaneously. Testing is performed to measure the delivery rate from the PCCWST to the spent fuel pool and the delivery rate from the PCCAWST, aligned to the recirculation pumps, to the PCCWST and spent fuel pool simultaneously.

i) With the PCCWST water level at 27.4 ft + 0.2, - 0.0 ft above the bottom of the tank, the flow path from the PCCWST to the spent fuel pool delivers greater than or equal to 118 gpm.

Testing was performed as documented in Reference 1 to verify that the flow path from the PCCWST to the spent fuel pool delivered greater than or equal to 118 gpm with the PCCWST water level at 27.4 ft + 0.2, - 0.0 ft above the bottom of the tank. The delivery rate from the PCCWST to the spent fuel pool was measured with the PCCWST aligned to the SFP emergency makeup line. The Unit 4 PCCWST provided 177 gpm which demonstrated with the PCCWST water level at 27.4 ft + 0.2, - 0.0 ft above the bottom of the tank, the flow path from the PCCWST to the spent fuel pool delivers greater than or equal to 118 gpm.

With PCCAWST aligned to the suction of the recirculation pumps, each pump delivers greater than or equal to 100 gpm to the PCCWST and 35 gpm to the spent fuel pool simultaneously when each pump is tested separately.

Testing was performed as documented in Reference 1 to verify that with PCCAWST aligned to the suction of the recirculation pumps, each pump delivered greater than or equal to 100 gpm to the PCCWST and 35 gpm to the spent fuel pool simultaneously when each pump was tested separately. The delivery rate from the PCCAWST to the PCCWST and SFP was measured simultaneously with the B recirculation pump aligned to provide flow to the PCCWST and the SFP emergency makeup line. The flow to the PCCWST and to the SFP was measured, and the testing was repeated again with the PCCAWST aligned to the suction of the A recirculation pump. Each pump was tested separately, and measurements verify that Unit 4 pump A delivered 105.2 gpm to the PCCWST flow path while simultaneously delivering 39.2 gpm to the SFP. The Unit 4 pump B delivered 106.4 gpm to the PCCWST flow path while simultaneously delivering 40.1 gpm to the SFP flow path. The results of the testing confirmed that with the PCCAWST aligned to the suction of the recirculation pumps, each pump delivered greater than or equal to 100 gpm to the PCCWST flow path while simultaneously delivering 35 gpm to the SFP when each pump was tested separately, which meets the acceptance criteria.

The completed test results documented in Reference 1, confirm that with the PCCWST water level at 27.4 ft + 0.2, - 0.0 ft above the bottom of the tank, the flow path from the PCCWST to the spent fuel pool delivered greater than or equal to 118 gpm and that with the PCCAWST aligned to the suction of the recirculation pumps, each pump delivered greater than or equal to 100 gpm to the PCCWST and 35 gpm to the spent fuel pool simultaneously when each pump was tested separately.

Reference 1 is available for NRC inspection as part of the Unit 4 ITAAC Completion Package (Reference 2).

ITAAC Finding Review

In accordance with plant procedures for ITAAC completion, Southern Nuclear Operating Company (SNC) performed a review of all findings pertaining to the subject ITAAC and associated corrective actions. This review found there are no relevant ITAAC findings associated with this ITAAC. The ITAAC completion review is documented in the ITAAC Completion Package for ITAAC 2.2.02.07f.i (Reference 2) and is available for NRC review.

ITAAC Completion Statement

Based on the above information, SNC hereby notifies the NRC that ITAAC 2.2.02.07f.i was performed for VEGP Unit 4 and that the prescribed acceptance criteria were met.

Systems, structures, and components verified as part of this ITAAC are being maintained in their as-designed, ITAAC compliant condition in accordance with approved plant programs and procedures.

References (available for NRC inspection)

1. SV4-SFS-ITR-800145, Rev. 0, “Unit 4 Passive Containment Cooling System (PCS) Makeup Flow to SFP: ITAAC 2.2.02.07f.i, Item 7.f.i) and 8.b) NRC Number: 145”
2. 2.2.02.07f.i-U4-CP-Rev0, ITAAC Completion Package